



September 10, 2008

Waste Industry Experts

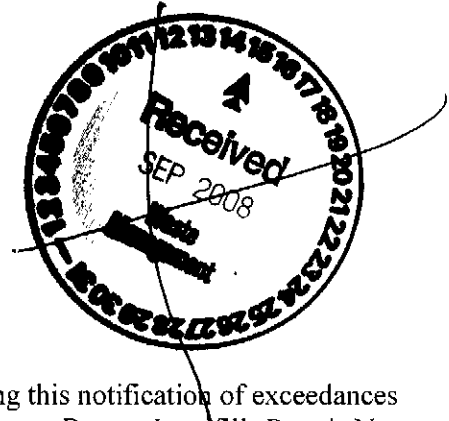
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Ms. Jackie Drummond
North Carolina Department of Environment and Natural Resources
Division of Waste Management, Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

**RE: Notification of Appendix II Constituent Detections and
Notification of NC-2L Groundwater Standard Exceedances
Granville County – Closed Butner Landfill
Permit No. 39-02
JEI Project No. 660.06, Task 24**



Dear Ms. Drummond:

On behalf of Granville County, Joyce Engineering, Inc. is submitting this notification of exceedances of 15A-NCAC-2L (NC-2L) groundwater standards at the Granville County – Butner Landfill, Permit No. 39-02 in accordance with Title 15A, Chapter 13, Subchapter 13B, Section .1634 (g) of the North Carolina Solid Waste Management Regulations. The first semiannual sampling event of 2008 at the Butner Landfill took place on July 7-8, 2008. The samples were sent to Pace Analytical Services, Inc., where the groundwater samples were analyzed for all constituents listed in NCSWMR Appendix II. The attached table summarizes the detected constituents from the first semiannual sampling event of 2008.

The results indicate exceedances of NC-2L standards for 1,4-dichlorobenzene in monitoring wells MW-2R and MW-3R, and benzene in MW-2R; however these detections are consistent with previous sampling events. Cobalt was detected in MW-5 at a concentration above its respective Groundwater Protection Standard (GPS), but this does not represent a statistically significant increase above background. Also, MW-6 had detections at estimated concentrations of three semi-volatile organic compounds; benzo(k)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene; however, after consulting with Pace Analytical Services, Inc. it was determined that these detections were most likely due to laboratory contamination.

These results are consistent with previous results for this facility; however, a complete data quality review has not been completed, nor have the initial statistical analyses been validated, so these results are considered preliminary. A complete groundwater monitoring and statistical analysis report will follow. If you have any questions or need additional information, please feel free to contact me or Michelle Brown at (336) 323-0092.

Sincerely,
JOYCE ENGINEERING, INC.

Van Burbach, Ph.D., PG
Technical Consultant

Attachment

Copy: Jason Falls, Granville County
JEI File

TABLE 1: Detected Constituents - First Semiannual Sampling Event of 2008

Parameter	Sample Date:		07/08/2008	07/08/2008	07/08/2008	07/08/2008	07/08/2008	07/08/2008	07/07/2008	07/07/2008	07/08/2008
	SWSL	NC-2L	3902-MW1R	3902-MW2R	3902-MW3R	3902-MW4	3902-MW5	3902-MW6	3902-SW1	3902-SW2	Blanks
Arsenic	10	50	ND	4.9 J	ND	ND	ND	ND	ND	ND	ND
Barium	100	2000	5.8 J	102	58.4 J	1.1 B	57.9 J	1.2 B	33.8 J	161	0.29 J
Beryllium	1	4*	ND	ND	ND	ND	ND	ND	0.32 J	ND	ND
Chromium	10	50	ND	0.54 J	0.58 J	ND	ND	ND	2.5 J	2.2 J	ND
Cobalt	10	70*	10.3 B	12.1 B	2.0 B	9.0 B	130	4.8 B	4.2 B	10.5 B	6.2 J
Copper	10	1000	0.64 J	ND	12.1	3.7 J	8.5 J	ND	1.7 J	4.2 J	ND
Nickel	50	100	ND	76.0	28.1 J	11.5 J	27.0 J	ND	3.2 J	29.8 J	ND
Silver	10	17.5	ND	2.7 J	2.3 J	1.1 J	0.22 J	0.69 J	0.35 B	1.0 J	0.12 J
Thallium	5.5	0.28*	ND	ND	ND	ND	ND	ND	3.4 J	ND	ND
Tin	100	-	4.4 J	28.6 J	15.1 J	5.4 J	3.0 J	3.6 J	-	ND	ND
Vanadium	25	3.5*	2.6 J	2.4 J	ND	14.6 J	1.4 J	1.2 J	5.2 J	2.3 J	0.20 J
Zinc	10	1050	5.9 B	ND	ND	ND	4.1 B	ND	ND	ND	1.2 J
Benzene	1	1	ND	1.4	0.51 J	0.32 J	ND	ND	ND	ND	ND
Chlorobenzene	3	50	ND	17.2	17.4	6.5	ND	ND	ND	ND	ND
Chloroethane	10	2800	ND	2.2 J	2.5 J	1.8 J	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	24	ND	1.6 J	2.0 J	0.39 J	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1	1.4	ND	3.0	2.4	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	70	ND	ND	ND	0.60 J	ND	ND	ND	ND	ND
Methylene Chloride	1	4.6	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J
Naphthalene	10	21	ND	3.8 J	ND	ND	ND	ND	ND	ND	ND
Toluene	1	1000	ND	0.39 J	ND	ND	1.3	ND	ND	ND	ND
Vinyl Chloride	1	0.015	ND	ND	0.76 J	ND	ND	ND	ND	ND	ND
Xylenes (Total)	4	530	ND	1.1 J	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	10	0.479	ND	ND	ND	ND	ND	3.8 J#	-	-	ND
Dibenz(a,h)anthracene	10	0.0047	ND	ND	ND	ND	ND	4.5 J#	-	-	ND
Indeno(1,2,3-cd)pyrene	10	0.0479	ND	ND	ND	ND	ND	6.8 J#	-	-	ND

SWSL = NC Solid Waste Section Reporting Limit

NC-2L = North Carolina Groundwater Standard (15A-NCAC-2L).

* = No listed NC-2L standard, listed value is the groundwater protection standard (GPS).

= Results are due to laboratory contamination per the case narrative included in report.

All results in µg/L (ppb).

ND = Not detected above the laboratory detection limit.

J = Estimated concentration above the laboratory detection limit but below the quantitation limit.

B = Blank-qualified detection.